

Title (en)

PREVENTING PATHOLOGICAL INCREASES IN THE RATE OF NERVE CELL SUICIDE IN IMMATURE NERVOUS SYSTEMS

Title (de)

VERHINDERUNG VON PATHOLOGISCHEN ANSTIEGEN DER NERVENZELLSUIZIDRATE IN UNREIFEN NERVENSYSTEMEN

Title (fr)

PREVENTION D'AUGMENTATIONS PATHOLOGIQUES DU SUICIDE DE LA CELLULE NERVEUSE DANS DES SYSTEMES NERVEUX IMMATURES

Publication

EP 1830856 A4 20080402 (EN)

Application

EP 05782582 A 20050802

Priority

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Abstract (en)

[origin: WO2006017524A2] Methods and compounds are disclosed for reducing brain damage in fetuses, neonates, and young infants, caused by surgical anesthetics. During critical periods of synapse formation and network development in the brain, CNS neurons that do not appear to be keeping pace with certain synchronized development and connection processes are regarded as surplus, and are destroyed by a programmed cell suicide process called apoptosis. As a result, if surgical anesthetics block neuronal responses and activities that normally would indicate that a certain CNS neuron is indeed active and involved in a network and should be preserved, such anesthesia can induce apoptotic death, in the unresponsive anesthetized neurons. That process, which can cause permanent brain damage, can be minimized by manipulating certain signaling pathways that affect the balance between apoptosis-promoting proteins (<i

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Citation (search report)

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